

WHAT IS CLAIMED IS:

- 1           1.       A method for making data available to an application program,  
2 comprising:  
3           generating a cursor positioned with respect to a result table, wherein the cursor  
4 specifies a search criteria, wherein the result table includes rows from a base table that  
5 satisfy the search criteria;  
6           receiving a fetch request indicating to position the cursor on a plurality of rows of  
7 the result table; and  
8           positioning the cursor on the plurality of rows of the result table indicated in the  
9 fetch request that satisfy the search criteria.
  
- 1           2.       The method of claim 1, further comprising:  
2           placing a lock on the plurality of rows of the result table on which the cursor is  
3 positioned.
  
- 1           3.       The method of claim 2, wherein the fetch request is received from a client  
2 at a server, further comprising:  
3           returning, by the server, the plurality of rows at the server on which the cursor is  
4 positioned to the client that sent the fetch request, wherein the lock is placed on the  
5 plurality of rows at the server to block the plurality of rows on which the cursor is  
6 positioned.
  
- 1           4.       The method of claim 2, further comprising:  
2           receiving a subsequent fetch request to reposition the cursor on at least one row of  
3 the result table; and  
4           releasing the lock on the plurality of rows of the result table on which the cursor  
5 is currently positioned before being repositioned.

1           5.     The method of claim 1, wherein the cursor is positioned on a current  
2 plurality of rows of the result table before receiving the fetch request, and wherein  
3 positioning the cursor further comprises:  
4           determining a rowset size; and  
5           positioning the cursor on a number of rows with respect to one row of the result  
6 table having rows that satisfy the search criteria.

1           6.     The method of claim 5, wherein positioning the cursor on the number of  
2 rows with respect to one row of the result table comprises one of:  
3           positioning the cursor on a number of rows preceding a first row of the current  
4 plurality of rows that satisfy the search criteria;  
5           positioning the cursor on a number of rows from a first row of the result table that  
6 satisfy the search criteria;  
7           positioning the cursor on a number of rows preceding an end of the result table  
8 that satisfy the search criteria;

1           7.     The method of claim 1, wherein the cursor is positioned on a current  
2 plurality of rows of the result table before receiving the fetch request specifying an  
3 integer  $k$ , and wherein positioning the cursor further comprises:  
4           determining a rowset size; and  
5           positioning the cursor on a number of rows that satisfy the search criteria and is  
6 positioned with respect to  $k$  rows from row of the result table having rows that satisfy the  
7 search criteria.

1           8.     The method of claim 7, wherein positioning the cursor on a number of  
2 rows that satisfy the search criteria and is positioned with respect to  $k$  rows from row of  
3 the result table comprises one of:

4           positioning the cursor on a number of rows that satisfy the search criteria and  
5 precede  $k$  rows preceding a first row of the current plurality of rows that satisfy the  
6 search criteria;  
7           positioning the cursor on a number of rows that satisfy the search criteria and  
8 follow a number of rows equal to the rowset size from a  $k$ th row from a first row of the  
9 result table;  
10          positioning the cursor on a number of rows that satisfy the search criteria and  
11 precedes  $k$  rows that satisfy the search criteria preceding a last row of the result table; and

1           9.     The method of claim 1, further comprising:  
2           receiving a request to modify at least one row in the rows on which the cursor is  
3 positioned; and  
4           modifying the at least one row on which the cursor is positioned as indicated in  
5 the request.

1           10.    The method of claim 9, wherein the modification comprises updating or  
2 deleting the at least one row on which the cursor is positioned as indicated in the request.

1           11.    The method of claim 1, wherein the cursor comprises one of a static cursor  
2 or dynamic cursor, wherein if the cursor is static, then the cursor is either sensitive or  
3 insensitive to changes in the base table from which the result table is generated.

1           12.    The method of claim 1, wherein the cursor is positioned on a current  
2 plurality of rows of the result table before receiving the fetch request, and wherein the  
3 current plurality of rows is a different number than a number of the rows on which the  
4 cursor is positioned in response to the fetch request.

1           13.    A system for making data available to an application program,  
2 comprising:

3           a memory;  
4           a base table;  
5           a result table, wherein the result table includes rows from a base table that satisfy  
6 a search criteria;  
7           means for generating a cursor positioned with respect to the result table;  
8           means for receiving a fetch request indicating to position the cursor on a plurality  
9 of rows of the result table; and  
10          means for positioning the cursor on the plurality of rows of the result table  
11 indicated in the fetch request that satisfy the search criteria.

1           14.    The system of claim 13, further comprising:  
2           means for placing a lock on the plurality of rows of the result table on which the  
3 cursor is positioned.

1           15.    The system of claim 14, wherein the fetch request is received from a client  
2 at a server, further comprising:  
3           means, performed by the server, for returning the plurality of rows at the server  
4 on which the cursor is positioned to the client that sent the fetch request, wherein the lock  
5 is placed on the plurality of rows at the server to block the plurality of rows on which the  
6 cursor is positioned.

1           16.    The system of claim 14, further comprising:  
2           means for receiving a subsequent fetch request to reposition the cursor on at least  
3 one row of the result table; and  
4           means for releasing the lock on the plurality of rows of the result table on which  
5 the cursor is currently positioned before being repositioned.

1           17.    The system of claim 13, wherein the cursor is positioned on a current  
2 plurality of rows of the result table before receiving the fetch request, and wherein the  
3 means for positioning the cursor further performs:  
4           determining a rowset size; and  
5           positioning the cursor on a number of rows with respect to one row of the result  
6 table having rows that satisfy the search criteria.

1           18.    The system of claim 17, wherein the means for positioning the cursor on  
2 the number of rows with respect to one row of the result table performs one of:  
3           positioning the cursor on a number of rows preceding a first row of the current  
4 plurality of rows that satisfy the search criteria;  
5           positioning the cursor on a number of rows from a first row of the result table that  
6 satisfy the search criteria;  
7           positioning the cursor on a number of rows preceding an end of the result table  
8 that satisfy the search criteria;

1           19.    The system of claim 1, wherein the cursor is positioned on a current  
2 plurality of rows of the result table before receiving the fetch request specifying an  
3 integer  $k$ , and wherein the means for positioning the cursor further performs:  
4           determining a rowset size; and  
5           positioning the cursor on a number of rows that satisfy the search criteria and is  
6 positioned with respect to  $k$  rows from a row of the result table having rows that satisfy  
7 the search criteria.

1           20.    The system of claim 19, wherein the means for positioning the cursor on a  
2 number of rows that satisfy the search criteria and is positioned with respect to  $k$  rows  
3 from a row of the result table performs one of:

4           positioning the cursor on a number of rows that satisfy the search criteria and  
5 precede  $k$  rows preceding a first row of the current plurality of rows that satisfy the  
6 search criteria;  
7           positioning the cursor on a number of rows that satisfy the search criteria and  
8 follow a number of rows equal to the rowset size from a  $k$ th row from a first row of the  
9 result table; and  
10          positioning the cursor on a number of rows that satisfy the search criteria and  
11 precedes  $k$  rows that satisfy the search criteria preceding a last row of the result table; and

1           21.    The system of claim 13, further comprising:  
2           means for receiving a request to modify at least one row in the rows on which the  
3 cursor is positioned; and  
4           means for modifying the at least one row on which the cursor is positioned as  
5 indicated in the request.

1           22.    The system of claim 13, wherein the cursor comprises one of a static  
2 cursor or dynamic cursor, wherein if the cursor is static, then the cursor is either sensitive  
3 or insensitive to changes in the base table from which the result table is generated.

1           23.    An article of manufacture for making data available to an application  
2 program, wherein the article of manufacture causes operations to be performed, the  
3 operations comprising:  
4           generating a cursor positioned with respect to a result table, wherein the cursor  
5 specifies a search criteria, wherein the result table includes rows from a base table that  
6 satisfy the search criteria;  
7           receiving a fetch request indicating to position the cursor on a plurality of rows of  
8 the result table; and  
9           positioning the cursor on the plurality of rows of the result table indicated in the  
10 fetch request that satisfy the search criteria.

1           24.     The article of manufacture of claim 23, wherein the operations further  
2     comprise:  
3           placing a lock on the plurality of rows of the result table on which the cursor is  
4     positioned.

1           25.     The article of manufacture of claim 24, wherein the fetch request is  
2     received from a client at a server, and wherein the operations further comprise:  
3           returning, by the server, the plurality of rows at the server on which the cursor is  
4     positioned to the client that sent the fetch request, wherein the lock is placed on the  
5     plurality of rows at the server to block the plurality of rows on which the cursor is  
6     positioned.

1           26.     The article of manufacture of claim 24, wherein the operations further  
2     comprise:  
3           receiving a subsequent fetch request to reposition the cursor on at least one row of  
4     the result table; and  
5           releasing the lock on the plurality of rows of the result table on which the cursor  
6     is currently positioned before being repositioned.

1           27.     The article of manufacture of claim 23, wherein the cursor is positioned on  
2     a current plurality of rows of the result table before receiving the fetch request, and  
3     wherein positioning the cursor further comprises:  
4           determining a rowset size; and  
5           positioning the cursor on a number of rows with respect to one row of the result  
6     table having rows that satisfy the search criteria.

1           28.     The article of manufacture of claim 27, wherein positioning the cursor on  
2     the number of rows with respect to one row of the result table comprises one of:

3           positioning the cursor on a number of rows preceding a first row of the current  
4 plurality of rows that satisfy the search criteria;  
5           positioning the cursor on a number of rows from a first row of the result table that  
6 satisfy the search criteria;  
7           positioning the cursor on a number of rows preceding an end of the result table  
8 that satisfy the search criteria;

1           29.    The article of manufacture of claim 23, wherein the cursor is positioned on  
2 a current plurality of rows of the result table before receiving the fetch request specifying  
3 an integer  $k$ , and wherein positioning the cursor further comprises:  
4           determining a rowset size; and  
5           positioning the cursor on a number of rows that satisfy the search criteria and is  
6 positioned with respect to  $k$  rows from row of the result table having rows that satisfy the  
7 search criteria.

1           30.    The article of manufacture of claim 29, wherein positioning the cursor on  
2 a number of rows that satisfy the search criteria and is positioned with respect to  $k$  rows  
3 from row of the result table comprises one of:  
4           positioning the cursor on a number of rows that satisfy the search criteria and  
5 precede  $k$  rows preceding a first row of the current plurality of rows that satisfy the  
6 search criteria;  
7           positioning the cursor on a number of rows that satisfy the search criteria and  
8 follow a number of rows equal to the rowset size from a  $k$ th row from a first row of the  
9 result table;  
10          positioning the cursor on a number of rows that satisfy the search criteria and  
11 precedes  $k$  rows that satisfy the search criteria preceding a last row of the result table; and



1           31.     The article of manufacture of claim 23, wherein the operations further  
2     comprise:  
3           receiving a request to modify at least one row in the rows on which the cursor is  
4     positioned; and  
5           modifying the at least one row on which the cursor is positioned as indicated in  
6     the request.

1           32.     The article of manufacture of claim 31, wherein the modification  
2     comprises updating or deleting the at least one row on which the cursor is positioned as  
3     indicated in the request.

1           33.     The article of manufacture of claim 23, wherein the cursor comprises one  
2     of a static cursor or dynamic cursor, wherein if the cursor is static, then the cursor is  
3     either sensitive or insensitive to changes in the base table from which the result table is  
4     generated.

1           34.     The article of manufacture of claim 23, wherein the cursor is positioned on  
2     a current plurality of rows of the result table before receiving the fetch request, and  
3     wherein the current plurality of rows is a different number than a number of the rows on  
4     which the cursor is positioned in response to the fetch request.